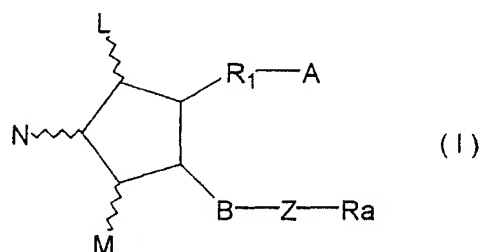


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method for treating obesity in a mammalian subject, which comprises administering to a mammalian subject in need of reduction of body weight an effective amount of a prostaglandin compound as shown by the following formula (I):



wherein L, M and N are hydrogen atom, hydroxy, halogen atom, lower alkyl, hydroxy(lower)alkyl, lower alkanoyloxy or oxo, wherein at least one of L and M is a group other than hydrogen, and the five-membered ring may have at least one double bond;

A is -CH₃, or -CH₂OH, -COCH₂OH, -COOH or a salt, ether, ester or amide thereof;

B is single bond, -CH₂-CH₂-, -CH=CH-, -C≡C-, -CH₂-CH₂-CH₂-, -CH=CH-CH₂-, -CH₂-CH=CH-, -C≡C-CH₂- or -CH₂-C≡C-;

Z is C=O;

R₁ is a saturated or unsaturated bivalent lower or medium aliphatic hydrocarbon residue, which is unsubstituted or substituted with halogen, alkyl, hydroxy, oxo, aryl selected from the

group consisting of phenyl, tolyl and xylol which is unsubstituted or substituted or heterocyclic group selected from the group consisting of furyl, thienyl, pyrrolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, imidazolyl, pyrazolyl, furazanyl, pyranol, pyridyl, pyridazinyl, pyrimidyl, pyrazinyl, 2-pyrrolyl, pyrrolidinyl, 2-imidazolyl, imidazolidinyl, 2-pyrazolyl, pyrazolidinyl, piperidino, piperazinyl, morpholino, indolyl, benzothienyl, quinolyl, isoquinolyl, purinyl, quinazolinyl, carbazolyl, acridinyl, phenanthridinyl, benzimidazolyl, benzimidazolinyl, benzothiazolyl and phenothiazinyl which is unsubstituted or substituted, and at least one carbon atom in the aliphatic hydrocarbon is optionally substituted by oxygen, nitrogen or sulfur; and

Ra is a saturated or unsaturated lower or medium aliphatic hydrocarbon residue, which is unsubstituted or substituted with one or more substituents selected from the group consisting of halogen, oxo, hydroxy, lower alkoxy, lower alkanoyloxy, cyclo(lower)alkyl, cyclo(lower)alkyloxy, aryl, aryloxy, heterocyclic group and heterocyclic-oxy group; lower alkoxy; lower alkanoyloxy; cyclo(lower)alkyl; cyclo(lower)alkyloxy; aryl; aryloxy; heterocyclic group; or heterocyclic-oxy.

2. (canceled).

3. (previously presented): The method as described in Claim 18, wherein said prostaglandin compound is a 16-mono or dihalogen-prostaglandin compound.

4. (previously presented): The method as described in Claim 18, wherein said prostaglandin compound is a 13,14-dihydro-16-mono or dihalogen-prostaglandin compound.

5. (previously presented): The method as described in Claim 1, wherein said prostaglandin compound is a 13,14-dihydro-15-keto-16-mono or dihalogen-prostaglandin compound.

6. (previously presented): The method as described in Claim 18, wherein said prostaglandin compound is a 13,14-dihydro-16-mono or difluoro-prostaglandin compound.

7. (previously presented): The method as described in Claim 1, wherein said prostaglandin compound is a 13,14-dihydro-15-keto-16-mono or difluoro-prostaglandin compound.

8. (previously presented): The method as described in Claim 18, wherein said prostaglandin compound is a 13,14-dihydro-16-mono or dihalogen-prostaglandin E compound.

9. (previously presented): The method as described in Claim 1, wherein said prostaglandin compound is a 13,14-dihydro-15-keto-16-mono or dihalogen-prostaglandin E compound.

10. (previously presented): The method as described in Claim 18, wherein said prostaglandin compound is a 13,14-dihydro-16,16-difluoro-prostaglandin E₁ compound.

11. (previously presented): The method as described in Claim 1, wherein said prostaglandin compound is a 13,14-dihydro-15-keto-16,16-difluoro-prostaglandin E₁ compound or 13,14-dihydro-15-keto-16,16-difluoro-18-methyl-prostaglandin E₁ compound.

12. (original): The method as described in Claim 1, which comprises systemic administration 1-4 times per day or continuous administration at the amount of 0.01-100 $\mu\text{g/kg}$ per day.

13. (original): The method as described in Claim 12, wherein the administration is at the amount of 0.1-10 $\mu\text{g/kg}$ per day.

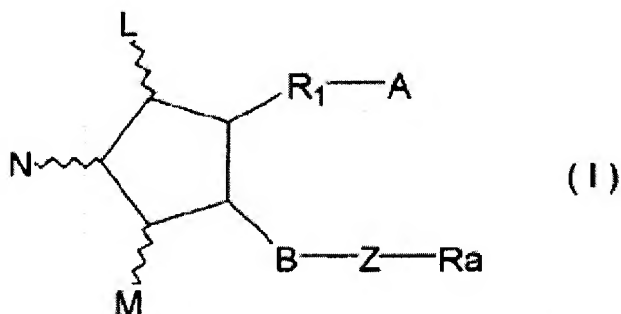
14. (canceled).

15. (canceled).

16. (canceled).

17. (canceled).

18. (previously presented): A method for treating obesity in a mammalian subject which comprises administering to a mammalian subject in need of reduction of body weight an effective amount of a prostaglandin compound as shown by the following general formula (I):

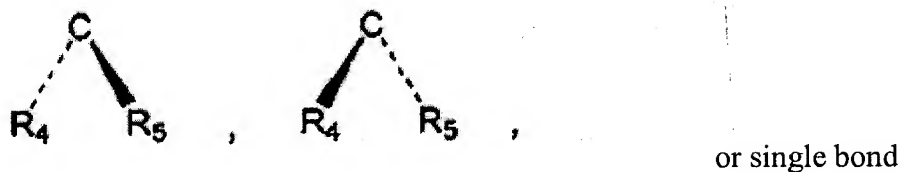


wherein L, M and N are hydrogen atom, hydroxy, halogen atom, lower alkyl, hydroxy(lower)alkyl, lower alkanoyloxy or oxo, wherein at least one of L and M is a group other than hydrogen, and the five-membered ring may have at least one double bond;

A is $-\text{CH}_3$, or $-\text{CH}_2\text{OH}$, $-\text{COCH}_2\text{OH}$, $-\text{COOH}$ or a functional derivative salt, ether, ester or amide thereof;

B is single bond, $-\text{CH}_2-\text{CH}_2-$, $-\text{CH}=\text{CH}-$, $-\text{C}\equiv\text{C}-$, $-\text{CH}_2-\text{CH}_2-\text{CH}_2-$, $-\text{CH}=\text{CH}-\text{CH}_2-$, $-\text{CH}_2-\text{CH}=\text{CH}-$, $-\text{C}\equiv\text{C}-\text{CH}_2-$ or $-\text{CH}_2-\text{C}\equiv\text{C}-$;

Z is



wherein R_4 and R_5 are hydrogen, hydroxy, halogen, lower alkyl, lower alkoxy or hydroxy(lower)alkyl, wherein R_4 and R_5 are not hydroxy and lower alkoxy at the same time;

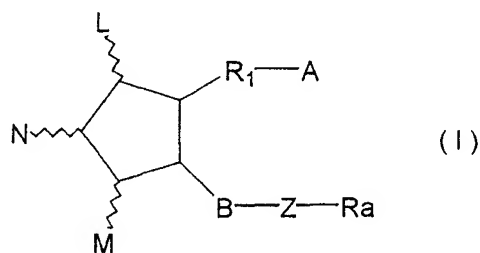
R_1 is a saturated or unsaturated bivalent lower or medium aliphatic hydrocarbon residue, which is unsubstituted or substituted with halogen, alkyl, hydroxy, oxo, aryl selected from the group consisting of phenyl, tolyl and xylyl which is unsubstituted or substituted or heterocyclic group selected from the group consisting of furyl, thienyl, pyrrolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, imidazolyl, pyrazolyl, furazanyl, pyranlyl, pyridyl, pyridazinyl, pyrimidyl, pyrazolyl, 2-pyrrolinyl, pyrrolidinyl, 2-imidazolyl, imidazolidinyl, 2-pyrazolyl, pyrazolidinyl, piperidino, piperazinyl, morpholino, indolyl, benzothienyl, quinolyl, isoquinolyl, purinyl, quinazolinyl, carbazolyl, acridinyl, phenanthridinyl, benzimidazolyl, benzimidazolinyl, benzothiazolyl and phenothiazinyl which is unsubstituted or substituted, and at least one of

carbon atom in the aliphatic hydrocarbon is optionally substituted by oxygen, nitrogen or sulfur;
and

R_a is a saturated or unsaturated lower or medium aliphatic hydrocarbon residue which is unsubstituted or substituted with and may have a further substituent selected from the group consisting of oxo, hydroxy, lower alkoxy, lower alkanoyloxy, cyclo(lower)alkyl, cyclo(lower)alkyloxy, aryl, aryloxy, heterocyclic group and heterocyclic-oxy group; lower alkoxy; lower alkanoyloxy; cyclo(lower)alkyl; cyclo(lower)alkyloxy; aryl; aryloxy; heterocyclic group; heterocyclic-oxy.

19. (previously presented): The method as described in Claim 1, wherein said prostaglandin compound is a 15-keto-16-mono or di-halogen prostaglandin compound.

20. (new): The method as described in Claim 1, wherein comprises administering to a mammalian subject in need of treatment for obesity an effective amount of a prostaglandin compound as shown by the following general formula (I) to reduce body weight:



wherein L, M and N are hydrogen atom, hydroxy, halogen atom, lower alkyl, hydroxy(lower)alkyl, lower alkanoyloxy or oxo, wherein at least one of L and M is a group other than hydrogen, and the five-membered ring may have at least one double bond;

A is $-\text{CH}_3$, or $-\text{CH}_2\text{OH}$, $-\text{COCH}_2\text{OH}$, $-\text{COOH}$ or a salt, ether, ester or amide thereof;

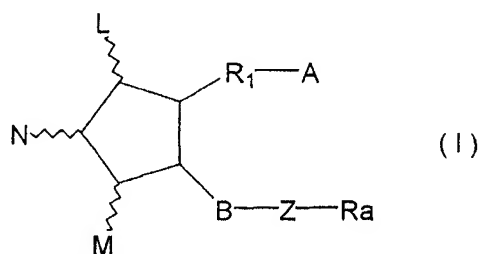
B is single bond, $-\text{CH}_2-\text{CH}_2-$, $-\text{CH}=\text{CH}-$, $-\text{C}\equiv\text{C}-$, $-\text{CH}_2-\text{CH}_2-\text{CH}_2-$, $-\text{CH}=\text{CH}-\text{CH}_2-$, $-\text{CH}_2-\text{CH}=\text{CH}-$, $-\text{C}\equiv\text{C}-\text{CH}_2-$ or $-\text{CH}_2-\text{C}\equiv\text{C}-$;

Z is $\text{C}=\text{O}$;

R_1 is a saturated or unsaturated bivalent lower or medium aliphatic hydrocarbon residue, which is unsubstituted or substituted with halogen, alkyl, hydroxy, oxo, aryl selected from the group consisting of phenyl, tolyl and xylyl which is unsubstituted or substituted or heterocyclic group selected from the group consisting of furyl, thienyl, pyrrolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, imidazolyl, pyrazolyl, furazanyl, pyranal, pyridyl, pyridazinyl, pyrimidyl, pyrazinyl, 2-pyrrolinyl, pyrrolidinyl, 2-imidazolinyl, imidazolidinyl, 2-pyrazolinyl, pyrazolidinyl, piperidino, piperazinyl, morpholino, indolyl, benzothienyl, quinolyl, isoquinolyl, purinyl, quinazolinyl, carbazolyl, acridinyl, phenanthridinyl, benzimidazolyl, benzimidazolinyl, benzothiazolyl and phenothiazinyl which is unsubstituted or substituted, and at least one carbon atom in the aliphatic hydrocarbon is optionally substituted by oxygen, nitrogen or sulfur; and

Ra is a saturated or unsaturated lower or medium aliphatic hydrocarbon residue, which is unsubstituted or substituted with one or more substituents selected from the group consisting of halogen, oxo, hydroxy, lower alkoxy, lower alkanoyloxy, cyclo(lower)alkyl, cyclo(lower)alkyloxy, aryl, aryloxy, heterocyclic group and heterocyclic-oxy group; lower alkoxy; lower alkanoyloxy; cyclo(lower)alkyl; cyclo(lower)alkyloxy; aryl; aryloxy; heterocyclic group; or heterocyclic-oxy.

21. (new): A method for reducing body weight in a mammalian subject which comprises administering to a mammalian subject in need of treatment for obesity an effective amount of a prostaglandin compound as shown by the following general formula (I) to reduce body weight:



wherein L, M and N are hydrogen atom, hydroxy, halogen atom, lower alkyl, hydroxy(lower)alkyl, lower alkanoyloxy or oxo, wherein at least one of L and M is a group other than hydrogen, and the five-membered ring may have at least one double bond;

A is -CH₃, or -CH₂OH, -COCH₂OH, -COOH or a salt, ether, ester or amide thereof;

B is single bond, -CH₂-CH₂-, -CH=CH-, -C≡C-, -CH₂-CH₂-CH₂-, -CH=CH-CH₂-, -CH₂-CH=CH-, -C≡C-CH₂- or -CH₂-C≡C-;

Z is C=O;

R₁ is a saturated or unsaturated bivalent lower or medium aliphatic hydrocarbon residue, which is unsubstituted or substituted with halogen, alkyl, hydroxy, oxo, aryl selected from the group consisting of phenyl, tolyl and xylyl which is unsubstituted or substituted or heterocyclic group selected from the group consisting of furyl, thienyl, pyrrolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, imidazolyl, pyrazolyl, furazanyl, pyranal, pyridyl, pyridazinyl, pyrimidyl, pyrazinyl, 2-pyrrolinyl, pyrrolidinyl, 2-imidazolinyl, imidazolidinyl, 2-pyrazolinyl,

pyrazolidinyl, piperidino, piperazinyl, morpholino, indolyl, benzothienyl, quinolyl, isoquinolyl, purinyl, quinazolinyl, carbazolyl, acridinyl, phenanthridinyl, benzimidazolyl, benzimidazoliny, benzothiazolyl and phenothiazinyl which is unsubstituted or substituted, and at least one carbon atom in the aliphatic hydrocarbon is optionally substituted by oxygen, nitrogen or sulfur; and

Ra is a saturated or unsaturated lower or medium aliphatic hydrocarbon residue, which is unsubstituted or substituted with one or more substituents selected from the group consisting of halogen, oxo, hydroxy, lower alkoxy, lower alkanoyloxy, cyclo(lower)alkyl, cyclo(lower)alkyloxy, aryl, aryloxy, heterocyclic group and heterocyclic-oxy group; lower alkoxy; lower alkanoyloxy; cyclo(lower)alkyl; cyclo(lower)alkyloxy; aryl; aryloxy; heterocyclic group; or heterocyclic-oxy.